FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. MUTU12.001DV1	APPLICATION NO. Unknown	
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U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
ish	1	5,840,217	Nov. 24, 98	Lupo et al.	252	583	
COM	2	5,026,894	Jan. 25, 91	Tour et al.	558	46.	

	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
3	Smet, et al., A GENERAL SYNTHESIS OF DISUBSTITUTED RUBICENES, 1998, J. Org. Chem., 2769-2773
4	Smet, et al. A NOVEL ACID-CATALYZED REARRANGEMENT OF 9,10-DIARYL-9,10-DIHYDROANTHRACENE-9,10-DIOLS AFFORDING 10,10'-DIARYL-9-ANTHRONES., 1999, Elsevier Science Ltd., Tetrahedron 55 7859-7874.
5	Hamada et al., Organic light-emitting diodes using a gallium complex., April 20, 1998, American Institute of Physics, Volume 72, No. 16.
6	Murata et al., Organic light-emitting devices with saturated red emission using 6, 13-diphenylpentacene., April 16, 2001, American Institute of Physics, Volume 78, No. 16.
7	Shi et al., Doped organic electroluminescent devices with improved stability., March 31, 1997, American Institute of Physics, Volume 70, No. 13.
8	Adachi et al., High-efficiency organic electrophosphorescent devices with tris(2-phenylpyridine) iridium doped into electron-transporting materials., August 7, 2000, American Institute of Physics, Volume 77, No. 6.
9	Adachi et al., High-efficiency red electrophosphorescence devices Marhc 12, 2001, American Institute of Physics, Volume 78, No. 11.
10	Burrows et al., Operating lifetime of phosphorescent organic light emitting devices., May 1, 2000, American Institute of Physics., Volume 76, No. 18.
11	Baldo et al., Very high-efficiency green organic light-emitting devices based on electrophosphorescence., July 5, 1999, American Institute of Physics., Volume 75, No. 1.
12	Baldo et al., Improved energy transfer in electrophosphorescent devices., January 18, 1999, American Institute of Physics., Volume 74, No. 3.
13	Hamada et al., Organic light-emitting diodes using 3- or 5-hydroxyflavone-metal compexes., December 8, 1997, American Institute of Physics., Volume 71, No. 23.
14	Baldo et al., Improved energy transfer in electrophosphorescent devices., January 18, 1999, American Institute of Physics., Volume 74, No. 3.
15	Gigli et al., High-efficientcy oligothiopene-based light-emitting diodes., July 26, 1999, American Institute of Physics., Volume 75, No. 4.
16	Kido et al., Fabrication of highly efficient organic electroluminescent devices., November 9, 1998, American Institute of Physics., Volume 73, No. 19.
17	Yang et al., Photoluminescence and electroluminescence properties of dye-doped polymer system 1997, Elsevier Science S.A., Sythetic Metals., 335-336.
18	Watanabe et al. Optimization of emitting efficiency in organic LED cells using Ir complex., 2001, Elsevier Science S.A., Sythetic Metals., 203-207.
19	Liedenbaum., Low voltage operation of large area polymer LEDs., 1997, Elsevier Science S.A., Sythetic Metals., 109- 111.
	5 6 7 8 9 10 11 12 13 14 15 16 17 18

EXAMINER	C/M	L.	DATE CONSIDERED	11/24/04	
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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY, DOCKET MUTU12.001E		APPLICATION Unknown	10/718.083
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EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	+	
un		Hide et al., Conjugated polymers as solid-state laser materials., 1997, Elsevier Science S.A., Sythetic Metals., 35-40.
CUR	21	Muckl et al., Transient electroluminescence measurements on organic heterolayer light emitting diodes., 2000, Elsevier Science S.A., Sythetic Metals., 91-94.
con		Shoustikov et al., Orange and red organic light-emitting devices using aluminum tris(5-hydroxyquinoxaline), 1997, Elsevier Science S.A., Sythetic Metals., 217-221.
can	-	Tokito et al., strongly modified emissio from organic elelctroluminescent device with a microcavity., 1997. Elsevier Science S.A., Sythetic Metals., 49-52.
CM		Wakimoto et al., Stability characteristics of quinacridone and coumarin molecules as guest dopants in the organic LEDs., 1997, Elsevier Science S.A., Sythetic Metals., 15-19.
CH	25	Ma et al., Bright blue electroluminescent devices utiliaing poly (N – vinylcarbazole) doped with fluorescent dye., 1997, Elsevier Science S.A., Sythetic Metals., 331-332.
CAM	26	Sano et al., Organic eletroluminescent devices doped condensed polycyclic aromatic compounds., 1997, Elsevier Science S.A., Sythetic Metals., 27-30.
Cap	27	Mitschke et al., The electroluminescence of organic materials., 2000. The Royal Society of Chemistry, 1471-1507.
:cm	28	Barbarella et al., Modified Oligothiophenes with High Photo and Electroluminescence Efficiencies., 1999, Advanced Materals, 11, No. 16.
CAN	-	Schmitz et al., Polyneric Light-Emitting Diodes Based on Poly(p-phenylene ethynylene), Poly(triphenyldiamine), and Spiroquinoxaline., 2001, Advanced Functional Materials, 11, No. 1
Can	Lamansky et al., Synthesis and Characterization of Phosphorescent Cyclometalated Iridium Complexes of Chemistry, University of Southern California, 1704-1711.	
om	$\vdash$	Lamansky et al., Highly Phosphorescent Bis-Cyclometalated Iridium Complexes: Synthesis, Photophysical Characterization, and Use in Organic Light Emitting Diodes., 2001, American Chemical Society, 123, 4304-4312.
CH		Tsutsui et al., High Quantum Efficiency in Organic Light-Emitting Devices with Iridium-Complex as a Triplet Emissive Center., 1999, Japanese Journal fo Applied Physics., Volume 38, L1502-L1504.
con		Naito et al., Molecular Design for Nonpolymeric Organic Dye Glasses with Thermal Stability: Relations between Thermodynamic Parameters and Amorphous Properties., 1993, The Journal of Physical Chemistry, Volume 97, No. 23, 6240-6248,
CH	- 1	Bath et al., Electron mobility in tris(8-hydroxy-quinoline)aluminum thin filims determined via transient eletroluminescence from single- and multilayer organic light-emitting diodes., April 1, 2001, Journal of Applied Physics, Volume 89, No. 7, 3711-3719.
CAN	35	Adachi et al., Organic electroluminescence of silole-incorporated polysilane., 2000, Journal of Luminescence, Volume 87 89, 1174-1176.
cm	36	Clarkson et al., Sprans with four aromatic radicals on the spiro carbon atom., 1930, The Chemistry Laboratory of the Unoversity of Michigan, Volume 52, 2881-2891.

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EXAMINER DATE CONSIDERED \*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.